

REMARKS

Reconsideration and allowance are respectfully requested.

Claims 1-19 are currently pending.

The specification has been amended to incorporate the proper headings under rule 37 CFR 1.97.

Claim 18 drawn to the barrier or gate has been cancelled.

Claims 5, 6, 7, 11, 13 and 14 have been amended to overcome the informalities set forth in the action mailed June 28, 2005.

In response to the rejections of the claims, claim 10 has been incorporated into claim 1 with the alternative expression relating to the step displacement being half of the cross sectional width of the conduit placed in new claim 21. The applicant respectfully submits that these changes render all the pending claims unobvious and novel over the cited references.

The present invention relates to a diffuser arrangement of a combustor wherein the diffuser arrangement comprises a wall surface in a fluid flow conduit formed with an aperture between an upstream part of the wall surface and a downstream part of the wall surface. The downstream part of the wall surface has a step displacement away from a projected profile of the upstream part of the wall surface wherein the step displacement is between 0.05 and 0.12 of the conduit radius or half the conduit cross-sectional width.

ADKINS (US 4,497,445) and CORNELL (US 3,216,455) do not anticipate the present invention because they both fail to disclose a step displacement

between 0.05 and 0.12 of the conduit radius or half the conduit cross sectional width as claimed in currently amended claim 1 or new claim 21. .

EDELFEIT (US 3,011,307) relates to a variable throat diffuser for a supersonic engine intake. The present invention relates to a diffuser arrangement of a combustor for an engine. In addition, EDELFEIT does not provide a dimension for the bleed passage 23 and does not disclose a step displacement between 0.05 and 0.12 of the conduit radius or half the conduit cross sectional width as claimed in currently amended claim 1 and new claim 21

DAILEY et al. (US 6,334,297) and VERDOUW (US 4,796,429) disclose an arrangement for a diffuser of a combustor but fail to give dimensions for the arrangement. Furthermore, both DAILEY et al. and VERDOUW do not disclose a step displacement between 0.05 and 0.12 of the conduit radius or half the conduit cross sectional width as claimed in the present claims.

DePAUL et al. (US 4,471,910) discloses a radial diffuser comprising flared outer walls defining a circular bleed slot therebetween. DePaul discloses that the downstream edge of the slot defined by the flared outer wall 3 is stepped into the gas flow relative to a continuous curve leading from the upstream wall 2 (Column 5 lines 9-20, illustrated in Fig. 1). Thus the downstream edge of the slot defined by the flared outer wall 3 does not have a step displacement away from a projected profile of the upstream part of the wall surface as claimed in the currently amended claims.

A person of ordinary skill would not look to combine the cited prior art to achieve the present invention because none of the prior art includes a

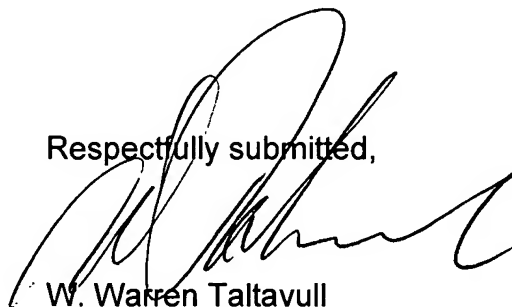
downstream part of the wall surface having a step displacement away from a projected profile of the upstream part of the wall surface wherein the step displacement is between 0.05 and 0.12 of the conduit radius or half the conduit cross-sectional width.

We have added new claim 20 to further distinguish the present invention from the cited prior art and also added claims 21 and 22 to cure the alternative expression in original claim 10.

We would like to point out that submitted herewith and under separate cover are the priority document GB 0229307.4 and an information disclosure statement with the references cited.

Entry of this amendment is solicited, is believed appropriate, and is believed to distinguish the invention from the cited references. For the foregoing reasons, reconsideration and allowance are believed in order and are solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'W. Warren Taltavull', is written over the typed name.

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